State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

DAQE-IN0238009-04

March 29, 2004

Eugene Marshall
PacifiCorp
1407 West North Temple
Salt Lake City, Utah 84140

Dear Mr. Marshall:

Re: Intent to Approve: Modify AO DAQE-AN0238008-03 to Add a Real-Time Coal Analyzer
Huntington Power Plant Located in Emery County, Utah CDS-A, ATT, Title V
Project Code: N0238-009

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:NM:jc

cc: Southeastern Utah District Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: Modify AO DAQE-AN0238008-03 TO ADD A REAL-TIME COAL ANALYZER

Prepared By: Nando Meli, Engineer
(801) 536-4052
Email: nmeli@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0238009-04

Date: March 29, 2004

PacifiCorp
Source Contact
Eugene Marshall
(801) 220-2235

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

PacifiCorp operates an electric power plant near Huntington, Utah. The Huntington Plant is a coal-fired steam electric generating plant located in Emery County approximately 10 miles west of Huntington, Utah. The plant currently operates under the Approval Order (AO) DAQE-AN0238008-03, dated October 2, 2003, and the Title V permit #1501001001. The primary coal supply for the Huntington Plant is the Deer Creek Mine. The quality of the coal supplied to the plant varies because of rock extrusions into the coal seam being mined and the chemical constituents of the coal itself. In 2003 the plant began operating a coal blending pile and associated reclaim equipment. In order to optimize the operation of the plant and associated pollution control equipment it has become necessary to obtain real-time fuel quality data. Having the ability to know what the real-time quality of the fuel being burned will aid PacifiCorp in the overall management of stack emissions. In order to do this the plant plans to install a coal analyzing system. Emery County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) Subpart D (Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971) applies to boiler unit #1. Title V of the 1990 Clean Air Act applies to this source. The Title V operating permit for this source shall be amended prior to the operation of the coal analyzer and associated equipment. There will be no increase in emissions from the coal analyzer and associated equipment.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Sun Advocate on April 6, 2004. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This Approval Order (AO) applies to the following company:

Site Office		Corporate Office Location
Huntington Power Plant		PacifiCorp
P. O. Box 680		1407 W. North Temple
Huntington, UT 84528		Salt Lake City, UT 84140
Phone Number	(435) 687-4306	(801) 220-2235
Fax Number	(435) 687-4201	(801) 220-4307

The equipment listed in this AO shall be operated at the following location:

The Huntington plant is located on State Highway 31, 10 miles west of Huntington, Emery County, Utah

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,358.8 kilometers Northing, 493.1 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.

5. All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for the minimum period of five years.

6. PacifiCorp shall install and operate the Real-Time Coal Analyzer and associated equipment and shall conduct its operations of the Huntington power plant in accordance with the terms and conditions of this AO, which was written pursuant to PacifiCorp's Notice of Intent submitted to the Division of Air Quality (DAQ) on February 12, 2004, and additional information submitted to DAQ on February 19, 2004.

7. This AO shall replace the AO (DAQE-AN0238008A-03) dated October 2, 2003.

8. The approved installations shall consist of the following equipment or equivalent*:

A. Boiler Unit #1

Unit Description: Nominal 480 MW gross capacity dry bottom, tangentially fired utility boiler fired on sub bituminous and bituminous coal using fuel oil during startup & flame stabilization. System is equipped with electrostatic precipitator and SO2 FGD scrubber system.

B. Boiler Unit #2

Unit Description: Nominal 480 MW gross capacity dry bottom tangentially fired utility boiler fired on sub bituminous and bituminous coal using fuel oil during startup & flame stabilization. System is equipped with an electrostatic precipitator.

C. Coal Storage

Unit Description: Existing covered coal storage facility and open coal pile. No unit specific applicable requirements.

D. Ash Landfill

Unit Description: Ash and sludge disposal. No unit specific applicable requirements.

E. Unit #1 Cooling Towers

Unit Description: Unit #1 cooling towers for the circulating water system. No unit specific applicable requirements.

F. Unit #2 Cooling Towers

Unit Description: Unit #2 cooling towers for the circulating water system. No unit specific applicable requirements.

G. Coal Conveyors

Unit Description: Coal transfer on plant site

H. Ash Haul Road (dirt)

Unit Description: Unpaved ash haul road. No unit specific applicable requirements.

I. Ash Haul Road (paved)

Unit Description: Paved ash haul road. No unit specific applicable requirements.

J. Unit #1 Emergency Generator (diesel engine)

Unit Description: Emergency generator (diesel engine) for Unit #1. No unit specific applicable requirements.

K. Unit #2 Emergency Generator (diesel engine)

Unit Description: Emergency generator (diesel engine) for Unit #2. No unit specific applicable requirements.

L. Emergency Fire Pump (diesel engine)

Unit Description: Emergency fire pump (diesel engine). No unit specific applicable requirements.

M. Auxiliary Steam Boiler for Unit #1

Unit Description: 120 MMBtu/hr auxiliary steam boiler fired on fuel oil and constructed in 1975 for Unit #1 No unit specific applicable requirements.

N. Auxiliary Steam Boiler for Unit #2

Unit Description: 93 MMBtu/hr auxiliary steam boiler fired on fuel oil and constructed in 1970 for Unit #2. No unit specific applicable requirements.

O. Coal Silo System Exhauster for Unit #1

Unit Description: Coal silos for Unit #1 equipped with exhausters and dust collectors. No unit specific applicable requirements.

P. Coal Silo System Exhauster for Unit #2

Unit Description: Coal silos for Unit #2 equipped with exhausters and dust collectors. No unit specific applicable requirements.

Q. Lime Silo Bin Vent

Unit Description: Fabric filter baghouse on lime storage silo. No unit specific applicable requirements.

R. Distillate Fuel Oil Tanks

Unit Description: Three 70,000-gallon tanks (1973) and day tanks for the emergency diesel generators and fire pumps. No unit specific applicable requirements.

S. Lube Oil Storage Tanks

Unit Description: Four 10,000-gallon tanks that store lubricating oil including vents and associated equipment; two each constructed in 1973 and 1975. No unit specific applicable requirements.

T. Oil Storage Area

Unit Description: Storage area for oil contained in closed 55-gallon drums. No unit specific applicable requirements.

U. Paved Access Road and Parking Area

Unit Description: Paved access road from the plant entrance to the administration building and parking area. No unit specific applicable requirements.

V. Cold Solvent Degreasing Operations

Unit Description: Bench top cold degreasing units using Safety Kleen, Simple Green, or other comparable degreasing agents. No unit specific applicable requirements.

W. Miscellaneous Electrical Equipment

Unit Description: Fugitive emission units including transformer insulating oil. No unit specific applicable requirements.

X. Diesel Refueling Stations and Storage Tanks (designated as Emission unit #26)

Unit Description: One 5,000 and one 1,500-gallon aboveground diesel fuel tank and dispensing pumps to refuel fleet vehicles and mobile equipment. No unit specific applicable requirements.

Y. Gasoline Vehicle Refueling Station and Tanks

Unit Description: Gasoline refueling for fleet vehicles from two 1,500-gallon aboveground tanks constructed in December 1991. No unit specific applicable requirements.

Z. Unit #1 Generator Seal Oil Air Detraining Tanks

Unit Description: Atmospheric vents from the seal oil air detraining tanks for Boiler Unit #1. No unit specific applicable requirements.

AA. Unit #2 Generator Seal Oil Air Detraining Tanks

Unit Description: Atmospheric vents from the seal oil air detraining tanks for Boiler Unit #2. No unit specific applicable requirements.

BB. Unit #1 Lube Oil Reservoirs

Unit Description: Lube oil reservoirs with vapor extractors for Boiler Unit #1. No unit specific applicable requirements.

CC. Unit #2 Lube Oil Reservoirs

Unit Description: Lube oil reservoirs with vapor extractors for Boiler Unit #2. No unit specific applicable requirements.

DD. Truck Mounted Vacuum System

Unit Description: Mobile truck mounted vacuum to clean up spilled material such as ash. No unit specific applicable requirements.

EE. Ash Unloader for Unit #1

Unit Description: Equipment for unloading ash from silos and into trucks for transport to the ash landfill. No unit specific applicable requirements.

FF. Ash Unloader for Unit #2

Unit Description: Equipment for unloading ash from silos and into trucks for transport to the ash landfill. No unit specific applicable requirements.

GG. Emission Units Subject to 40% Opacity Limit

Unit Description: Units constructed prior to April 25, 1971 consisting of Boiler Unit #2 coal silo system exhauster, Unit #2 ash unloader, Unit #2 Generator Seal Oil Air Detraining Tanks, Unit #2 Lube Oil Reservoirs, and the auxiliary boiler for Unit #2.

HH. Coal Reject Handling System

Unit Description: Material handling system that separates reject materials from the coal prior to pulverizing. No unit specific applicable requirements.

II. Hazardous Waste Storage Area

Unit Description: Area where hazardous waste is stored temporarily awaiting disposal. No unit specific applicable requirements.

JJ. Electro hydraulic Control Reservoirs

Unit Description: Three 400-gallon tanks that store lubricating oil. No unit specific applicable requirements.

KK. Water Treatment Chemical Tanks

Unit Description: Tank storage including chlorine, aluminum sulfate, lime, sodium sulfite, soda ash, calcium hypochlorite, sodium hydroxide, anti scale, aqueous ammonia. No unit specific applicable requirements.

LL. Anhydrous Sulfur Dioxide Tank

Unit Description: 10,000-gallon anhydrous sulfur dioxide tank to generate SO3 for ESP flue gas conditioning. No unit specific applicable requirements.

MM. Paint Storage Areas

Unit Description: Various storage areas for sealed paint containers. No unit specific applicable requirements.

NN. Coal Handling and Blending Equipment.

Unit Description: Truck unloading hopper enclosed on the sides with water sprays, covered conveyor belts with enclosed transfer stations, radial stacker, Stamler feeder with water sprays, and screens.

OO. Real Time Coal Analyzer
Unit Description: Thermo Electron CQM coal analyzer with hopper and associated covered conveyor belts with enclosed transfer stations equipped with dust closure seals and curtains at all loading points.

* Equivalency shall be determined by the Executive Secretary.

9. PacifiCorp shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8.OO has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed within eighteen months from the date of this AO, he Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke the AO in accordance with R307-401-11.

Limitations and Tests Procedures

10. Boiler Unit #1

A. Emissions of SO_2 from Boiler Unit #1 shall be no greater than 1.2 lb SO_2/MMBtu heat input for any 3 hour period as determined by the arithmetic average of three contiguous one hour periods except during periods of startup, shutdown, maintenance/planned outage, or malfunction.

PacifiCorp shall install, calibrate, maintain, and operate a continuous monitoring system for measuring sulfur dioxide emissions. PacifiCorp shall determine compliance by periodic monitoring using procedures in 40 CFR Part 60.45, Emission and fuel monitoring (subparagraphs (a), (e), and (f)) and 60.13(e).

B. Emissions of SO_2 from Boiler Unit #1 shall be no greater than 20 percent of the potential combustion concentration based on the average inlet and average outlet SO_2 emissions determined as the arithmetic average of all hourly emission rates for the 30 successive boiler operating days.

PacifiCorp shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions. PacifiCorp shall determine compliance with the SO_2 reduction limit by periodic monitoring using procedures in 40 CFR Part 60.46a, Compliance provision (subparagraph (c), (d), (e), (g) and (h)), 60.47a, Emission monitoring (subparagraph (b), (d), (e), (f), (g), (h), (i) and (j)), and 60.48a, Compliance determination procedures and methods (subparagraph (c)).

C. Emissions of particulate matter (PM) from Boiler Unit #1 shall not be greater than 0.10 lb/MMBtu heat input except during periods of startup, shutdown, maintenance/planned outage or malfunction.

D. Emissions of NO_x from Boiler Unit #1 shall be no greater than 0.70 lb/MMBtu heat input for any 3 hour period as determined by the arithmetic average of three contiguous one hour periods except during periods of startup, shutdown, maintenance/planned outage or malfunction.

PacifiCorp shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions. PacifiCorp shall determine compliance by periodic monitoring using procedures in 40 CFR Part 60.45, Emission and fuel monitoring (subparagraphs (a), (e), and (f)) and 60.13(e).

E. Visible emissions shall be no greater than 20 percent opacity (six minute average) except for one six minute period per hour of not more than 27 percent opacity and except during periods of start up, shutdown, maintenance/planned outage, or malfunction.

PacifiCorp shall determine compliance with the visible emission limit by periodic monitoring using a continuous opacity monitoring (COM) system installed and operated in accordance with 40 CFR 60.45, Emission and fuel monitoring (subparagraphs (a) and (g)) and 60.13(e).

11. Boiler Unit #2

A. Sulfur content of any mixture of coal burned in Boiler Unit #2 shall be no greater than 1 lb/MMBtu gross heat input.

B. Visible emissions from Boiler Unit #2 shall be no greater than 40 percent opacity (six minute average) except for one three minute period per hour as a result of unavoidable combustion irregularities and except during periods of start up, shutdown, maintenance/planned outage, or malfunction.

12. All coal conveyors and drop points shall be enclosed.

13. Visible emissions from the coal reject handling system shall be no greater than 40 percent opacity.

14. Visible emissions shall be no greater than 5 percent opacity at all conveyor transfer points and conveyor drop points for the coal blending equipment.

15. Visible emissions shall be no greater than 10 percent opacity for the truck unloading hopper, radial stacker and all screens.

16. There shall be no visible emissions at the Real-Time coal analyzer and all conveyor transfer points and conveyor drop points associated for the Real-Time coal analyzer equipment.

Monitoring	A visual observation of the site shall be made at least once each month.
Record Keeping	A log of the visual inspections shall be maintained including the date and time of each inspection and the name of the person making the inspection.
Reporting	Any visible emissions observed, shall be reported as a deviation.

17. Visible emissions shall be no greater than 20 percent opacity except as listed in this AO or diesel engines as described in R307-201-1.

Roads and Fugitive Dust

18. PacifiCorp shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Huntington power Plant. PacifiCorp shall abide by the most current fugitive dust control plan approved by the Executive Secretary.

19. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.

20. The facility shall abide by all applicable requirements of R307-206 for Abrasive Blasting Emission Standards.

Fuels

21. The sulfur content of any fuel oil shall not exceed 0.85 lbs/MMBtu heat input. The sulfur content shall be determined by ASTM Methods D2015-77 or D3286-85 or approved equivalent.

Federal Limitations and Requirements

22. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart D, 40 CFR 60.40 to 60.49 (Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971) applies to the Boiler Unit #1. NSPS Subpart Y (NSPS for Coal Preparation Plants) applies to the coal preparation equipment.

Records & Miscellaneous

23. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and

maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.

24. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.

25. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:
http://www.airquality.utah.gov/

The annual emission estimations below include point source, fugitive emissions, fugitive dust and grandfathered emissions, and do not include road dust and tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the PacifiCorp Huntington power plant are currently calculated at the following values:

	Pollutant	Tons/yr
A.	PM_{10}	889.85
B.	SO_2	13,839.07
C.	NO_x	15,243.06
D.	CO	757.60
E.	VOC	90.31
F.	Sulfuric Acid	25.08
G.	HAPs	
	Acetaldehyde	0.86
	Benzene	1.97
	Benzyl Chloride	1.06
	Cyanide Compounds	3.78
	HCL	317.23
	Hydrogen Fluoride	183.55
	Isophorone	0.88

Methyl Chloride (Chloromethane)	0.80
Methyl Ethyl Ketone (2-Butanone)	0.59
Propionaldehyde	0.57
Selenium Compounds	1.97
Misc HAPs <0.5 tpy each	4.33
Total HAPs	517.59

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Rusty Ruby, Manager
New Source Review Section